

curred. Several minor disturbances, for which storm warnings were displayed, passed eastward near the international boundary line, but as a rule they did not cause winds greatly above the verifying velocities.

Severe frosts, harmful to tender vegetation, were of frequent occurrence in the more elevated portions of the district east of the Cascade Mountains, but in western Oregon and western Washington the temperature was quite mild and only light frosts occurred.—*A. B. Wollaber, Acting District Forecaster.*

WEST GULF FORECAST DISTRICT.

Unusually high temperatures prevailed over the district during the early part of the month, but toward the close of the month the temperature dropped below the normal. The first frost and freezing temperature of the season in the district occurred at Amarillo on the 19th, for which timely warnings had been issued. More general frosts occurred over the northern portion of the district on the 20th, 21st, 23d, 27th, and 28th, and warnings were issued for portions of the district for each of these dates. No severe storm visited the Gulf coast during the month, but high winds occurred on one or two dates, for which timely warnings were issued.—*I. M. Cline, District Forecaster.*

RIVERS AND FLOODS.

River conditions during October did not differ materially

from those of the preceding month. There was rather more water in the Mississippi River above the mouth of the Missouri, and somewhat less below. The Missouri, Ohio, and Tennessee were lower, and navigation on the latter remained practically at a standstill.

The crest of the Arkansas flood-wave of the latter part of September passed Wichita on the 8th, when the gage read 4.1 feet. The Canadian flood was the first to reach Fort Smith, the gage at that place reading 14 feet on the 6th. The wave from the upper Arkansas was of much less volume and added only about one foot to the water in the river when it arrived on the 12th.

Detailed reports of the floods of September in the Rio Grande Valley and the mountain districts of New Mexico and Colorado will be found in another part of this REVIEW.

The highest and lowest water, mean stage, and monthly range at 238 river stations are given in Table VII. Hydrographs for typical points on seven principal rivers are shown on Chart V. The stations selected for charting are Keokuk, St. Louis, Memphis, Vicksburg, and New Orleans, on the Mississippi; Cincinnati and Cairo, on the Ohio; Nashville, on the Cumberland; Johnsonville, on the Tennessee; Kansas City, on the Missouri; Little Rock, on the Arkansas; and Shreveport, on the Red.—*H. C. Frankenfield, Professor.*

CLIMATE AND CROP SERVICE.

By Mr. JAMES BERRY, Chief of Climate and Crop Division.

The following summaries relating to the general weather and crop conditions during October are furnished by the directors of the respective sections of the Climate and Crop Service of the Weather Bureau; they are based upon voluntary reports from meteorological observers and crop correspondents, of whom there are about 3000 and 14,000, respectively:

Alabama.—First two decades warm; last decade rather cold, with killing frost general in some districts, though too late to damage cotton, which was nearly all picked by close of month. Cotton yield generally about average, though slightly above in some localities. Much corn housed, yield good. Minor crops shortened by the drought, which began early in September and continued practically unbroken, and which interfered seriously with many industries. Some oats and wheat seeded.—*F. P. Chaffee.*

Arizona.—Weather generally dry, except in southeastern portion of the territory, but water was fairly plentiful for irrigation and stock. Temperatures averaged slightly below normal, but there was some quite cold weather in northern districts. Crops generally were too nearly matured to be materially injured by the cold weather. Plowing and seeding of grain were in progress during the month. Range feed was plentiful and well cured as hay, promising abundant winter feed. Stock was generally in fine condition.—*M. E. Blystone.*

Arkansas.—Temperature slightly above normal; rainfall deficient, with droughty conditions. Cotton opened rapidly; considerable progress made in gathering crop; picking completed in some sections, nearing completion in others; top crop light. Early corn garnered; late being gathered, almost a complete failure. Conditions unfavorable for fall plowing and seeding; very little done; less than usual acreage sown to small grains. Apples being gathered, yield light, quality fair. Stock not doing well on account of scarcity of water and poor condition of pastures.—*Edward B. Richards.*

California.—Heavy rains in the central and northern sections caused considerable damage to late grapes and slightly injured raisins and prunes on trays, although ample warnings were given. Beans and baled hay were also somewhat damaged. In other respects the early fall rains were of inestimable value, particularly to grass and early sown grain. The soil was in excellent condition, except in the south, and plowing and seeding were progressing. Oranges were coloring rapidly.—*G. H. Willson.*

Colorado.—Month favorable for ripening and harvesting of outstanding crops and fruit. Fall wheat and rye germinated well, but the acreage sown was below the average. Plowing was delayed in localities by the beet harvest, which was probably two-thirds finished by the close of the month. The crop was unusually good, both as to yield and quality.—*N. M. Cunningham.*

Florida.—The month was favorable for picking cotton, the bulk of which was housed. There was a marked deficiency in precipitation in western counties, where seeding for vegetables was retarded. Some small shipments of citrus fruits were made. The tropical storm over southern counties during the second decade damaged some citrus fruits and pineapples. Lowlands were flooded and vegetables were largely

ruined; much replanting will be necessary. The month averaged warmer and wetter than the normal.—*A. J. Mitchell.*

Georgia.—The drought continued during the month. Light showers fell on the 3d, 4th, 20th, and 26th. Growing crops seriously injured. Greatest scarcity of water for years; water hauled for stock and machinery. Little fall plowing. Seeded grain failed to germinate. Weather ideal for harvesting; cotton about gathered, staple fine, yield considerably above average. Corn harvesting nearing completion, yield excellent. Temperature about normal. Light frost general 16th, heavy in most sections, killing in north and central on the 23d and 24th.—*J. B. Marbury.*

Idaho.—The month was warmer than the average. Rain in the central and southern sections fell almost entirely from the 6th to the 16th, and in the northern sections from the 6th to the 19th, and on the 30th and 31st; the remainder of the month was bright and pleasant, enabling harvest of late fruits and other fall work to progress rapidly. The apple crop proved to be exceptionally heavy in some localities. Fall ranges were good.—*Edward L. Wells.*

Illinois.—Corn was practically safe in all districts before the coming of killing frosts on the 26-28th. Weather conditions were highly favorable for farm work and the maturing of corn. Considerable husking and cribbing had been done by end of month. General condition of wheat and pastures was quite satisfactory, but rain was needed in some localities. Potato output was above average. Fair apple crop of good quality was gathered in northern half, but light yield of inferior quality was indicated for southern counties.—*Wm. G. Burns.*

Indiana.—Generally killing frost did not occur until the last decade. Practically all corn matured without injury and cribbing began during the last week. Owing to droughty conditions in some southern counties wheat seeding was not entirely finished at the close of October, but generally the crop was up and growing nicely. Rye, clover, and pastures were in good condition. A fairly good crop of potatoes was secured. Apples were mostly gathered, with yield and quality below average. Tobacco was housed. An average crop of tomatoes was canned.—*W. T. Blythe.*

Iowa.—October was warmer and drier than usual. Conditions were favorable for maturing belated portion of corn crop and harvesting potatoes, apples, and vegetables. First general killing frost occurred on morning of 23d. Last decade was rainless and a fair start was made in cribbing corn, with yield above expectations. Pasturage was excellent. Fall wheat and rye made good growth. Fair progress was made in fall plowing.—*John R. Sage.*

Kansas.—Wheat made good progress during the month, and at its close was in fine condition, though in the southeastern and central-southern counties it was needing rain. Corn matured well and was being cribbed. Apples and potatoes were gathered and proved good crops. Range and pastures were good most of the month, and cattle were in good condition.—*T. B. Jennings.*

Kentucky.—Severe drought interfered with wheat seeding, and much of that sown failed to come up. Water for stock became very scarce, and in some localities it was difficult to get enough for household use. The weather was favorable for harvesting late crops. There was a killing

frost on the 27th, but as crops had been secured, no damage resulted.—*H. B. Hersey.*

Louisiana.—Dry month, with abnormally high temperature during the first decade. Conditions were favorable for harvesting crops. Cotton picking was completed in many sections, and was nearing completion generally except in scattered localities where one-fourth or more of crop remained in fields at close of month; yield about average. Fall planting and seeding in northern and central portions delayed on account of insufficient rainfall. Sugar crop heavy, grinding progressing; cane planting well advanced. Rice housed in good condition; yield below average.—*I. M. Cline.*

Maryland and Delaware.—Dry weather prevented much seeding of wheat and retarded germination until the 21st, after which the condition of the crop improved rapidly and was fair to good at the end of the month; an increased acreage was reported in several counties. The excellent corn crop was mostly harvested during the fine weather of the month. Pastures were short, but stock continued in good condition.—*Oliver L. Fassig.*

Michigan.—The weather during October was pleasant and generally very favorable for all kinds of field work and the growth of winter wheat and rye. Wheat was sown quite early this year and germinated finely, and since germination has made good growth. Late potatoes and sugar beets were secured in good condition, and the general yields were good. The potato crop was large and of good quality. Corn husking was well advanced at the close of the month.—*C. F. Schneider.*

Minnesota.—There was much cloudy weather till the 27th, with heavy local rains on the 9th and 19th. Freezing temperatures on the 6th killed everything but hardy vegetation, which was still green at the end of the month. Thrashing, plowing, and potato gathering were nearly finished. Corn husking was in progress during the month.—*T. S. Outram.*

Mississippi.—Extremely dry. Ideal weather for gathering crops. Killing frost in northern and central counties during last decade did little damage. At close of month cotton picking was nearing completion over the eastern and southern portions, and was unusually well advanced west and north; the bulk of the crop was secured in fine condition. Corn, cane, peas, and potatoes generally yielded well. Fall crops were a failure, and there was no fall seeding owing to prolonged drought. Water was very scarce.—*W. S. Belden.*

Missouri.—October weather was ideal for general farm work and for drying out corn. Ninety-five per cent of the late crop had fully matured before the first killing frost, which occurred on the 23d. Very little corn had been cribbed, and almost the entire crop was still in the fields at the close of the month. The earliest sown wheat had come to good stand, but that part of the crop sown later was not up at the close of the month owing to dryness of the soil.—*George Reeder.*

Montana.—The month was abnormally dry and warm. Range feed was fairly abundant in some of the eastern and southern counties; in most other sections it was scarce, except high up in the mountains, where inaccessible on account of distance from water. Fall plowing was much retarded, except where the soil could be moistened by irrigation. Much of the wheat and rye sown had not germinated at the close of the month. Early sown wheat in the counties west of the main divide looked well.—*R. F. Young.*

Nebraska.—October was warm, with ample rainfall. Corn matured fully, even in the latest fields, giving a good crop of excellent quality. Husking was just beginning the last week of the month. Fall sown grain was placed in the ground under unusually favorable conditions, came up quickly, and made a good growth. The Hessian fly was noticed in many winter wheat fields. Pastures were exceptionally good throughout the month.—*G. A. Loveland.*

Nevada.—The temperature was below and the precipitation above normal. Heavy showers during the first decade damaged hay and other crops in various parts of the State. The weather of the latter half of the month was clear and favorable for harvesting outstanding crops. An excellent crop of potatoes was dug and housed in good condition. Live stock as a rule had plenty of feed and were in fine condition.—*J. H. Smith.*

New England.—A severe storm prevailed throughout the district on the 21st, with high wind and gales and general rains. The high winds damaged fruit and shade trees. The weather for the remainder of the month was cool and pleasant and of the "Indian summer" type. Conditions were very favorable for crops and for farming operations generally. In some sections potatoes suffered severely from rot. Pastures and meadows remained green.—*J. W. Smith.*

New Jersey.—The prevailing conditions were exceptionally favorable for all farming operations. A large acreage of wheat, rye, and grass was seeded; good stands obtained, except in the southern section, where a great deficiency of rainfall retarded germination of wheat. Corn husking progressed; yield above average. Apples and pears better than expected. Only a little rot among stored potatoes.—*Edward W. McGann.*

New Mexico.—Heavy rains last of September and first decade of October caused extensive damage to roads, fields, low-lying ranges, hay, alfalfa, and field crops. In the lower Pecos Valley the highest water occurred on the 2d and caused much damage to dams and irrigation ditches. In San Juan County the highest water ever known was experienced on the 9th and very heavy damage resulted. Water abundant, ranges fair, stock in good condition.—*J. B. Sloan.*

New York.—Damaging frosts were general on the 22d and 23d; much damage to buckwheat, corn, apples, and grapes. High winds on the 30th destroyed a third of the apple crop, but a sufficient quantity of excellent quality remained on trees. Fall work was delayed by rains, but the weather was favorable for wheat and rye, which were in excellent condition. Fall feed good; good flow of milk. Yield of hops, beans, and buckwheat about the average.—*R. G. Allen.*

North Carolina.—The month was unusually dry, especially in the western section, where the total precipitation was a trace or none whatever at eight stations. The longest period of drought occurred at Linville, where it lasted from September 5 to October 31, or 57 days. Plowing for winter wheat and oats was much delayed, and fall crops generally were injured by the drought. Cotton was practically all picked, and corn was all gathered at the close of October.—*C. F. von Herrmann.*

North Dakota.—The greater portion of the month was cool and cloudy, with light to heavy rains in the eastern and northern sections, which not only delayed thrashing there, but damaged some shocked grain. The rains were very favorable for fall plowing, however, much of which was done during the month. Considerable grain, mostly wheat, was yet to be thrashed at the close of the month.—*B. H. Bronson.*

Ohio.—The temperature and precipitation averaged below normal. Light frosts occurred during the first half of the month and heavy and killing frosts during the latter half. Wheat looked well, except in the south, where the weather was too dry. Rye was starting well. Corn husking progressed. Potatoes were dug, giving fair yield. Tobacco was curing well. Apples were picked and there was a good crop in the northeast.—*Harry O. Geren.*

Oklahoma and Indian Territories.—Very dry weather and killing frosts caused much damage to growing crops. Fall plowing and seeding progressed slowly, and much wheat was unsown over the southwestern counties, with early and late wheat needing rain to advance germination and growth. The bulk of the cotton crop was secured in fine condition, with fair to good yields of a good staple. Corn, kafir corn, forage crops, and late Irish and sweet potatoes were secured, with fair to good yields.—*C. M. Strong.*

Pennsylvania.—Soil was generally in good condition and farm work well advanced. Early sown wheat and rye were well set and growing rapidly, except in southwestern counties where injured by drought; late sown rather backward but of good color. A heavy corn crop was secured without material damage and husking was well under way. Late buckwheat was damaged by early frosts on lowlands. Late potatoes and winter apples were excellent.—*T. F. Townsend.*

Porto Rico.—Heavy and excessive showers during the first twelve days caused some injury to small crops, but in general were beneficial and relieved the dry condition in the southern division. Cane made excellent progress. Considerable cane was planted for gran cultura. Cotton and coffee picking continued, locally, and some tobacco was sown. The yield of coffee was small as compared with last year. Small crops were generally abundant. Oranges of a good quality became plentiful near the close of the month. Pastures and stock were in excellent condition.—*E. C. Thompson.*

South Carolina.—Month exceptionally favorable for gathering ripened crops. Drought severe over central and western parts, and ground too dry for fall plowing or planting; moisture conditions better along the coast. Cotton all opened and nearly all was picked. Corn was nearly all gathered and other fall crops secured in excellent condition. A general heavy to killing frost on the 24th destroyed some unripe cotton bolls, but did little damage otherwise. The drought was injurious to truck and late root crops.—*J. W. Bauer.*

South Dakota.—Month generally favorable for outstanding crops, seeding and germination of winter grain, and for maturing corn. As a result of September frosts, however, about one-fifth of the corn crop will not be marketable. Thrashing was about finished. A good crop of potatoes was nearly all harvested. At the close of the month winter rye and the limited amount of winter wheat sown were in good condition, range pasturage was good, and the cribbing of corn was well begun. Plowing was rather backward.—*S. W. Glenn.*

Tennessee.—The month was one of the driest in the past 22 years. Plowing and the seeding of winter grains were seriously hindered by the drought. Cotton picking progressed rapidly and by the close of the month most of the crop had been gathered. Tobacco was all housed and cured in fine condition. Corn ripened well and was generally gathered. Heavy to killing frosts occurred about the 21st to 24th.—*H. C. Bate.*

Texas.—Weather conditions were unusually favorable for harvesting operations, but too dry for successful seeding and late forage crops. Frosts were general over the northern half of the State during the last decade, but the injury was immaterial. Rainfall was general, except over the extreme northern panhandle counties, on the 24th to 26th. Saving of cotton crop in excellent condition was completed with practically no loss. Gathering corn well advanced; yield generally good. Good progress made in the cutting and thrashing of rice; crop average. Sugar cane matured nicely and harvesting commenced. Seeding of grain general and active after the rains; increase in acreage probable. Gardens too badly damaged by dry weather to be benefited by rains, ex-

SUMMARY OF TEMPERATURE AND PRECIPITATION BY SECTIONS, OCTOBER, 1904.

In the following table are given, for the various sections of the Climate and Crop Service of the Weather Bureau, the average temperature and rainfall, the stations reporting the highest and lowest temperatures with dates of occurrence, the stations reporting greatest and least monthly precipitation, and other data, as indicated by the several headings.

The mean temperatures for each section, the highest and

lowest temperatures, the average precipitation, and the greatest and least monthly amounts are found by using all trustworthy records available.

The mean departures from normal temperature and precipitation are based only on records from stations that have ten or more years of observation. Of course the number of such records is smaller than the total number of stations.

Section.	Temperature—in degrees Fahrenheit.								Precipitation—in inches and hundredths.					
	Section average.	Departure from the normal.	Monthly extremes.				Section average.	Departure from the normal.	Greatest monthly.		Least monthly.		Amount.	Amount.
			Station.	Highest.	Date.	Station.			Station.	Amount.	Station.	Amount.		
Alabama	64.6	+ 0.7	Newbern	101	2	4 stations	25	23	0.34	-2.15	Citronelle	2.08	12 stations	0.00
Arizona	63.2	- 0.6	Mohawk Summit	109	5	St. Johns	17	19	0.63	-0.38	Alpine	3.94	11 stations	0.00
Arkansas	62.7	+ 0.6	Howe	100	5	Taylor	17	26, 27	0.95	-1.59	Russellville	3.32	2 stations	T.
California	61.6	+ 0.2	Palm Spring	102	3	Pond	24	23	0.95	-1.59	Delta	13.94	8 stations	0.00
Colorado	46.7	- 0.1	Rocky Ford	89	12	Bodie	- 2	17	2.74	+1.23	Durango	3.39	Grover	T.
Florida	78.3	+ 1.2	Molino	100	12	Breckenridge	- 5	20	0.82	-0.20	Jupiter	21.39	Apalachicola	0.00
Georgia	64.6	+ 0.6	Orange City	100	1, 25	Molino	30	25	4.63	+1.20	St. Marys	5.74	5 stations	0.00
Idaho	49.4	- 0.6	Lumpkin	101	2	Clayton	24	29	0.40	-2.49	Landore	2.99	Milner	0.47
Illinois	55.1	+ 0.3	Garnet	90	2, 5	Soldier	21	19	1.41	0.71	Zion	2.36	Loami	0.05
Indiana	53.8	- 0.6	Mascoutah	88	9	Dixon	21	28	0.41	-1.45	Angola	2.54	Hector	T.
Iowa	53.1	+ 1.0	Madison	90	1	Northfield	20	29	1.06	-1.24	Sioux Center	4.43	2 stations	0.14
Kansas	59.0	+ 1.5	Wauke	96	4	Earlham	16	27	1.67	-0.73	Norton	3.65	Macksville	0.10
Kentucky	57.2	- 0.5	Medicine Lodge	96	4	Achilles	13	25	1.18	-0.92	Manchester	1.60	Bowling Green	0.05
Louisiana	69.7	- 2.6	Irvington	93	9	Loretto	20	28	0.52	-1.66	South Univ. Farm	2.13	3 stations	0.00
Maryland and Delaware	53.6	- 1.9	Monroe	101	2	Jackson	20	31	0.62	-2.35	Darlington, Md.	5.30	Solomons, Md.	1.13
Michigan	47.4	- 1.1	Boettcherville, Frederick, Md.	91	10	Leesville	32	20	0.62	-2.35	Mackinac Island	6.65	Adrian	0.65
Minnesota	47.4	+ 0.6	Coldwater	88	10	Plain Dealing	32	29	0.62	-2.35	Maple Plain	6.88	Hallock	0.39
Mississippi	65.8	+ 1.3	Worthington	82	3	Grantsville, Md.	14	31	2.62	-0.60	Bay St. Louis	2.45	12 stations	0.00
Missouri	57.6	+ 0.5	Leakesville	100	1	Humboldt	15	23	2.94	-0.10	Miami	2.20	Lamotte	T.
Montana	47.8	+ 2.4	Warsaw	90	10	Poekama Falls	11	6	3.50	+1.30	Hamilton	1.29	Miles City	0.00
Nebraska	53.8	+ 2.2	Duck Hill	100	1	Warsaw	19	26	0.90	-1.84	Greeley	6.87	Gordon	0.20
Nevada	47.8	- 1.8	Grayling	88	2	Agate	12	25	2.44	+0.87	Lewer's Ranch	3.60	Hawthorne	0.13
New England*	46.5	- 3.0	Lynch	95	3	Pioche	6	17	1.20	+1.12	Westfield, Vt.	4.19	Berlin Mills, N. H.	0.62
New Jersey	51.9	- 2.4	Calliente	91	4	Chatham, N. H.	11	31	2.25	-1.55	Lambertville	7.01	Atlantic City	1.50
New Mexico	53.0	- 0.3	Hartford, Conn.	81	18	Westfield, Vt.	15	31	3.78	+0.12	Fort Bayard	8.18	Springer	0.05
New York	46.7	- 2.3	Vineland	89	10	Luna	14	18	1.88	+0.82	Franklinville	6.11	2 stations	1.56
North Carolina	57.7	- 2.1	Carlsbad	96	5	Paul Smiths	8	31	3.20	-0.22	Rockingham	4.80	3 stations	0.00
North Dakota	46.6	+ 4.2	West Berne	84	10	Linville	14	24	1.38	-2.23	Buxton	2.81	4 stations	T.
Ohio	52.2	- 1.3	Southern Pines	93	11	Berthold Agency	10	4	1.03	-0.12	New Alexandria	3.55	Green	0.25
Oklahoma and Indian Territories	63.4	+ 1.2	Dickinson	87	1	Orangeville	15	31	1.50	-0.69	Durant, Ind. T.	3.42	Frederick, Okla.	0.00
Oregon	53.4	+ 2.1	Thurman	92	5, 10	Vinita, Ind. T.	20	3	0.98	-1.60	Gold Beach	8.17	Blalock	0.35
Pennsylvania	50.6	- 1.0	Goodwater, Ind. T.	100	5	Cleo, Okla.	20	3	0.98	-1.60	Forks of Neshaminy	7.11	Franklin	1.26
Porto Rico	78.0	- 0.3	Erick, Okla.	100	3	Klamath Falls	17	17	2.57	-0.31	Rio Blanco	25.78	San Juan	3.55
South Carolina	62.4	- 0.6	Grant's Pass	93	1	Smethport	12	31	2.87	-0.17	Charleston	4.75	Walhalla	0.00
South Dakota	51.8	+ 2.9	Irwin	91	19	Adjuntas	56	24	11.74	-2.09	Vermilion	6.67	Rosebud	T.
Tennessee	58.2	- 0.2	Central Aguirre	99	21	Greenville, Sautuc	26	24	1.10	+0.71	Wildersville	2.90	7 stations	T.
Texas	68.4	+ 0.9	Clarks Hill	98	12	Brookings	17	6	1.78	-1.73	Kopperl	10.50	Jefferson	0.13
Utah	48.7	- 0.1	Leola	93	16	Rugby	20	24, 28	0.71	+0.44	Kelton	3.00	4 stations	T.
Virginia	55.7	- 2.0	Waynesboro	92	10	Silver Lake	20	24	0.71	-1.73	Dinwiddie	3.09	2 stations	T.
Washington	52.0	+ 2.1	Grapevine, Trinity, Waxahachie	102	3	Tulia	24	26	2.89	-0.74	Clearwater	7.52	2 stations	0.19
West Virginia	54.5	- 0.1	St. George	97	6	Soldier Summit	7	19, 20	0.92	+0.12	Wellsburg	3.02	Green Sulphur Sp'gs.	0.40
Wisconsin	48.7	- 0.1	Saxe	94	11	Coyote	7	19	0.92	+0.12	Medford	3.00	Racine	1.47
Wyoming	45.4	+ 1.4	Zindel	90	3	Burkes Garden	10	24	1.35	-2.03	Alcova	1.90	Lusk	0.00
			Hamlin	92	10	Wilbur	18	17	1.73	-0.74				
			Moorefield	92	1	Bayard	16	28, 29	1.59	-0.59				
			Prairie du Chien	85	10, 19	Oseola	15	29	3.94	+1.35				
			Prairie du Chien	85	10, 19	South Pass City	- 4	18	0.79	-0.02				

* Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, and Connecticut.

cept in coast district. Pastures greatly benefited by recent rains.—*William H. Alexander.*

Utah.—Weather conditions were very favorable for farm work. Oppor-tune rains during the fore part of the month placed the soil in fine condition for plowing, and fair weather later enabled this work to be pushed vigorously. At the close of the month early sown wheat was coming up in localities and doing well. The acreage sown to fall grain showed a large increase over that of last year. Beet gathering continued, with the yield generally above average. Ranges were fine, feed plentiful, and stock thriving.—*L. Lodholz.*

Virginia.—The progress of crops throughout the major part of the month was considerably retarded by dry weather. Late seeding of turnips, wheat, oats, and clover advanced very slowly until the 20th, when a general rain fell in all portions of the State, except the southwest, and fall crops and pastures were much improved. The end of the month found crops in all sections in better condition than at the beginning.—*Edward A. Evans.*

Washington.—The temperature was mild and very uniform, and there were many days without rain; therefore the month was very favorable for gathering late crops, such as potatoes, root crops, fall vegetables, and apples. Wheat sown in September and during the first week in October was put into very dry soil. The copious rains of second decade

germinated the wheat and put the soil in condition for seeding, which continued the remainder of the month.—*G. N. Salisbury.*

West Virginia.—The weather during the month was very dry, with killing frosts. Fall seeding was about completed, but wheat was germinating slowly and doing poorly on account of lack of moisture. Pastures were dried up, and the prospects were that feeding would begin earlier than usual. Stock were in fairly good condition. But little corn was husked, as fodder was too dry to handle. Apples were mostly gathered, but were rotting quite badly.—*E. C. Vose.*

Wisconsin.—The heavy and continuous rains during the first decade interfered with the digging of potatoes to some extent, but resulted in no material damage to the crop, which was large and of excellent quality. Winter wheat and rye made excellent growth during the month. Fall work was well advanced. The latter part of the month was mild and very pleasant.—*W. M. Wilson.*

Wyoming.—The month was unusually pleasant throughout the State, there being an average of 19 clear days during the month for the State. The temperature extremes were not unusual, and the precipitation averaged about normal. The month was extremely favorable for all live stock which were in excellent condition. The ranges afforded good feed for stock.—*W. S. Palmer.*